LMA District Cover Sheet

Spring 2018 Levee Inspection Results

Reclamation District No. 2062 Stewart

	(March - May)	(June - August)	(September - November)	(December - February)						
† Overall LMA Rating (Fall Only)										
	** Non-receipt of Summ Reports may effect or									
† SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.										
FALL INSPECTIONS: The overall maintena within the attached u			tion and maintenance de ended to be an indiction (
Comments										

Unit Cover Sheet

Spring 2018 Levee Inspection Results

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles
Unit No. 01 San Joaquin River	Left	2.64

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	5/22/2018 - 5/22/2018			
DWR Inspector	Richard Willoughby			
Accompanied By	John Hale RD2062			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	05/22/2018 05/22/2018	Richard Willoughby

LM Start		Rating **	Α	Issue No.		2	
LM End		Issue Type +	Ma	Location *			
Category	Earthen L	evee		GPS La	atituc	le/Longitude	
Category				Start		End	
Item		s & Maintena	nce		0		0
пеш	Manuals				0		0
DWR ID	DWR ID DWR_RD2062_01_f _ 2013_2						
		Comn	nent Cod	le			
		Inspecto	or Comm	nent			
The O&M Manaual is available at the LMA's office.							

No Photos

LM Start		Rating **	Α	Issue No.		5		
LM End		Issue Type +	Ma	Location *				
Category	GPS La	atitud	le/Longitude					
Calegory				Start		End		
Item	Emergency Supplies &				0		0	
пеш	Equipmer	nt			٥		0	
DWR ID	DWR_RD2	062_01_s _ 201	3_5					
		Comn	nent Cod	de				
	Inspector Comment							
Adequate	flood fight	supplies are a	vailable	on-site.				

No Photos

LM Start		Rating **	Α	Issue No.		8	
LM End		Issue Type +	Ма	Location *			
Category	Earthen L	evee		GPS La	atituc	le/Longitude	
Category				Start		End	
ltem	Flood Preparedness & Training				0		0
Item			0		0		
DWR ID	DWR_RD2	062_01_s _ 201	3_8				
		Comn	nent Cod	le			
		Inspecto	or Comm	ent			

No Photos

The LMA has a flood fight emergency response plan. LMA has attended DWR flood fight taring class.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.00	Rating **	М	Issue No.		6
LM End	2.64	Issue Type +	Ma	Location *		LS
Earthen Levee			GPS La	atitud	le/Longitude	
Category				Start		End
Item	Vegetatio	n		37.8075	05°	37.787249°
пеш						-121.308947 °
DWR ID DWR_RD2062_01_s _ 2018_6						
		Comn	nent Cod	le		
V1 : Contr	ol annual g	rass and wee	ds on th	e levee slo	pes	and
easements	S.					
		Inspecto	or Comm	nent		



Looking downstream at typical view of landward slope.

LM Start	0.00	Rating **	М	Issue No.		7	
LM End	2.64	Issue Type +	Ма	Location *	WS		
Category Earthen Levee			GPS La	atitud	le/Longitude		
Calegory				Start		End	
ltom	Vegetation			37.807505°		37.787247°	
пеш	Item		-121.328103 °		-121.308948 °		
DWR ID	DWR_RD2	062_01_s _ 201	8_7				
		Comn	nent Cod	le			
V1 : Control annual grass and weeds on the levee slopes and easements.							
Inspector Comment							



Looking upstream at typical view of waterward slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	05/22/2018 05/22/2018	Richard Willoughby

							_
LM Start	1.64	Rating **	M	Issue No.	9		
LM End	1.64	Issue Type +	ype + En Location *				
Category				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UC	IP Field Study		37.7935	21 °	37.793521	0
пеш				-121.3153	48 °	-121.315348	0
DWR ID							

Comment Code

Inspector Comment

FS ID:22807 DS_ID:19177 EP NO: 12679

Repair Type: Non-Urgent Crossing Status: Found

1.64

LM End

UCIP Comments: - All 3 pipes on landside looks new.- Pumps, pump house, and pipes removed from waterside. - Land development activities going on in this area.- Needs to confirm from LMA or DWR Inspector about the crossing

FIELD_STRUCT_DESC: 1 of 3: 16-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. Electrical conduit through the levee. Slant pump in a pump house on the waterside (WS) slope. Siphon breaker on the landside (LS) slope. Service pole and concrete gate valve box at the landside (LS) toe. Installed by USACE in 1961. (Plans to replace rusted portions of two 16-inch irrigation pipes through the levee authorized under Permit No. 16124, 1993 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 1.65)]. FS Date: 10/22/2013

En

Location *

Rating ** LM Start 1.64 Issue No. Issue Type +

Photo 1 of 3: UCIP_SP_2018_22807_38905.jpg



WS view: pipes, walkway, and dismantled pumphouse (right).

Photo 2 of 3: UCIP_SP_2018_22807_38904.jpg



WS view: 16-inch pipes on both sides of walkway and 10-inch pipe (on right) away from walkway.

Rating : Acceptable Minimally Acceptable U: Unacceptable

N: Not Inspected/Rated C: Corrected

9 (cont)

Issue Type

Ma : Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.64	Rating **	M	Issue No.		9 (cont)
LM End	1.64	Issue Type +	En	Location *		
Category	Suppleme	GPS Latitude/Longitu				
Calegory	ory			Start		End
Item	DWR UC	IP Field Study		37.79352	1 °	37.793521 °
пеш				-121.31534	8 °	-121.315348°
DWR ID						

Comment Code

Inspector Comment

FS_ID:22807 DS_ID:19177 EP_NO: 12679

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - All 3 pipes on landside looks new.- Pumps, pump house, and pipes removed from waterside.- Land development activities going on in this area.- Needs to confirm from LMA or DWR Inspector about the crossing.

FIELD_STRUCT_DESC: 1 of 3: 16-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. Electrical conduit through the levee. Slant pump in a pump house on the waterside (WS) slope. Siphon breaker on the landside (LS) slope. Service pole and concrete gate valve box at the landside (LS) toe. Installed by USACE in 1961. (Plans to replace rusted portions of two 16-inch irrigation pipes through the levee authorized under Permit No. 16124, 1993 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 1.65)].

FS Date: 10/22/2013



WS view: two 16-inch pipes. Pumps were removed. Pumphouse dismantled.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.64	Rating **	М	Issue No.		10	
LM End	1.64	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory			Start		End		
Item	DWR UC	IP Field Study		37.79351	0 °	37.793510 °	
пеш				-121.31534	5 °	-121.315345 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:22809 DS_ID:19183 EP_NO: 12679

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - All 3 pipes on landside looks new.- Pumps, pump house, and pipes removed from waterside.- Land development activities going on in this area.- Needs to confirm from LMA or DWR Inspector about the crossing.

FIELD_STRUCT_DESC: 2 of 3: 16-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. Electrical conduit through the levee. Slant pump in a pump house on the waterside (WS) slope. Siphon breaker on the landside (LS) slope. Service pole and concrete gate valve box at the landside (LS) toe. Installed by USACE in 1961. (Plans to replace rusted portions of two 16-inch irrigation pipes through the levee authorized under Permit No. 16124, 1993 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 1.65)].

FS Date: 10/22/2013

LM Start	1.64	Rating **	М	Issue No.	10 (cont)
LM End	1.64	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_22809_38913.jpg



WS view: pipes, walkway, and dismantled pumphouse (right).

Photo 2 of 3: UCIP_SP_2018_22809_38912.jpg



WS view: 16-inch pipes on both sides of walkway and 10-inch pipe (on right) away from walkway.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.64	Rating **	M	Issue No.		10 (cont)	
LM End	1.64	Issue Type +	En	Location *			
Category	Suppleme	GPS Latitude/Longitude					
Calegory	legory			Start		End	
Item	DWR UC	IP Field Study		37.79351	0 °	37.793510	0
пеш				-121.31534	5°	-121.315345	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:22809 DS_ID:19183 EP_NO: 12679

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - All 3 pipes on landside looks new.- Pumps, pump house, and pipes removed from waterside.- Land development activities going on in this area.- Needs to confirm from LMA or DWR Inspector about the crossing.

FIELD_STRUCT_DESC: 2 of 3: 16-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. Electrical conduit through the levee. Slant pump in a pump house on the waterside (WS) slope. Siphon breaker on the landside (LS) slope. Service pole and concrete gate valve box at the landside (LS) toe. Installed by USACE in 1961. (Plans to replace rusted portions of two 16-inch irrigation pipes through the levee authorized under Permit No. 16124, 1993 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 1.65)].

FS Date: 10/22/2013



WS view: two 16-inch pipes under walkway; pumps were removed.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.64	Rating **	М	Issue No.		11	
LM End	1.64	Issue Type +	En	Location *			
Catagony	Supplemental				GPS Latitude/Longitude		
Calegory			Start		End		
Item	DWR UC	IP Field Study		37.79349	7 °	37.793497°	
пеш				-121.31534	°	-121.315340°	
DWR ID							

Comment Code

Inspector Comment

FS_ID:22810 DS_ID:19184 EP_NO: 12679

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - All 3 pipes on landside looks new. No pump associated with 8-inch pipe.- Pumps, pump house, and pipes removed from waterside.- Land development activities going on in this area.- Needs to confirm from LMA or DWR Inspector about the crossing.

FIELD_STRUCT_DESC: 3 of 3: 8-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Electrical conduit through the levee. Slant pump in a pump house on the waterside (WS) slope. Siphon breaker on the landside (LS) slope. Service pole and concrete gate valve box at the landside (LS) toe. (Plans to install a 75-horsepower pump on the bank with a 10-inch steel discharge pipe through the levee authorized under Permit No. 12679, 1979 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007].

FS Date: 10/22/2013

LM Start	1.64	Rating **	М	Issue No.	11 (cont)
LM End	1.64	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_22810_38918.jpg



WS view: pipes, walkway, and dismantled pumphouse (right).

Photo 2 of 3: UCIP SP 2018 22810 38917.jpg



WS view: electric conduit and 10-inch pipe (right). Dismantled/removed pipe and pump house (far right).

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.64	Rating **	M	Issue No.		11 (cont)	
LM End	1.64	Issue Type +	En	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		37.79349	7 °	37.793497 °	
пеш				-121.31534	o°	-121.315340 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:22810 DS_ID:19184 EP_NO: 12679

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - All 3 pipes on landside looks new. No pump associated with 8-inch pipe.- Pumps, pump house, and pipes removed from waterside.- Land development activities going on in this area.- Needs to confirm from LMA or DWR Inspector about the crossing.

FIELD_STRUCT_DESC: 3 of 3: 8-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Electrical conduit through the levee. Slant pump in a pump house on the waterside (WS) slope. Siphon breaker on the landside (LS) slope. Service pole and concrete gate valve box at the landside (LS) toe. (Plans to install a 75-horsepower pump on the bank with a 10-inch steel discharge pipe through the levee authorized under Permit No. 12679, 1979 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007].

FS Date: 10/22/2013

Photo 3 of 3: UCIP_SP_2018_22810_38916.jpg



LS view: two 16-inch pipes (left) and one 10-inch pipe (right) in ditch.

Concrete box removed.

Unit Cover Sheet

Spring 2018 Levee Inspection Results

Reclamation District No. 2062 Stewart

	Waterway	Bank	Unit Miles
ſ	Unit No. 02 Paradise Cut	Right	3.96

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	5/22/2018 - 5/22/2018			
DWR Inspector	Richard Willoughby			
Accompanied By	John Hale RD2062			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.00	Rating **	M	Issue No.		13		
LM End	1.96	Issue Type +	Ma	Location *		CR		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category		Start		End				
Item		rface / Depres	ssions /	37.7778	17°	37.796677°		
Item	Rutting				52 °	-121.359268 °		
DWR ID	DWR_RD2	062_02_s _ 201	8_13					
		Comn	nent Cod	le				
C2 : Repai	ir depressi	ons or ruts in	the crow	n or slope.				
	Inspector Comment							

No Photos

LM Start	0.00	Rating **	М	Issue No.		10	
LM End	3.96	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee				atitud	le/Longitude	
Calegory				Start		End	
Item	Vegetatio	Vegetation			17°	37.809297	0
пеш				Location * LS GPS Latitude/Longitu Start En 37.777817 ° 37.80 -121.333052 ° -121.38	-121.390322	٥	
DWR ID	DWR_RD2	062_02_s _ 201	8_10				
		Comn	nent Cod	le			

No Photos

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

LM Start	0.00	Rating **	М	Issue No.		11	
LM End	3.96	Issue Type +	Ma	Location *		WS	
Category	Earthen L	.evee	GPS Latitude/Longitu			e/Longitude	
Calegory				Start		End	
Vegetation		37.7778	17°	37.809297	0		
пеш				-121.3330	52 °	-121.390322	0
DWR ID	DWR_RD2	062_02_s _ 201	8_11				
		Comn	nent Cod	le			
V1 : Contre easements		grass and wee	eds on th	e levee slo	oes a	and	
		Inspecto	or Comm	ent			

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.56	Rating **	М	Issue No.		16
LM End	0.56	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		37.78438	30°	37.784380 °
пеш				-121.33898	35 °	-121.338985 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:23110 DS_ID:24697 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Found on field with the help of USACE 2012 PI

Report.Needs proper abandonment.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch steel irrigation discharge pipe through the levee, at an unknown depth. Damaged siphon breaker on the waterside (WS) slope. Pump on a concrete sump in an irrigation ditch on the landside (LS). Service pole on the LS slope. Pump disconnected from the service pole.

FS Date: 10/23/2013

LM Start	0.56	Rating **	M	Issue No.	16 (cont)
LM End	0.56	Issue Type +	Fn	Location *	



WS view: power pole (left), siphon breaker (marked- left), and steel pipe (right) on levee slope.

Photo 2 of 3: UCIP_SP_2018_23110_39397.jpg



WS view: exposed steel pipe and damaged siphon breaker on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.56	Rating **	М	Issue No.		16 (cont)		
LM End	0.56	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	IP Field Study		37.7843	80°	37.784380°		
пеш				-121.3389	85 °	-121.338985 °		
DWR ID								

Comment Code

Inspector Comment

FS_ID:23110 DS_ID:24697 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Found on field with the help of USACE 2012 PI

Report.Needs proper abandonment.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch steel irrigation discharge pipe through the levee, at an unknown depth. Damaged siphon breaker on the waterside (WS) slope. Pump on a concrete sump in an irrigation ditch on the landside (LS). Service pole on the LS slope. Pump disconnected from the service pole.

FS Date: 10/23/2013



WS view: exposed steel pipe on channel bank and also immersed into channel water.

LM Start	0.57	Rating **	U	Issue No.		15	
LM End	0.57	Issue Type +	En	Location *		CR	
Category	rainage & Pipi	GPS Latitude/Longitude					
Calegory	Systems			Start		End	
Item	Encroach	ments	nents		88 °	37.784488 °	
пеш				-121.3390	98 °	-121.339098 °	
DWR ID DWR_RD2062_02_s _ 2018_15							
		Comn	nent Cod	le			

Inspector Comment

Unauthorized installation.

Photo 1 of 4: SP_2018_RD2062_310_15_20180523_00027.jpg



Looking west at pipes on landward slope. (Spring 2018)

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.57	Rating **	U	Issue No.		15 (cont)		
LM End	0.57	Issue Type +	En	Location *	CR			
Category	rainage & Pipi	GPS Latitude/Longitude						
Calegory	Systems		Start End					
Itom	Encroach	ments		37.7844	88°	37.784488 °		
-121.3390					98°	-121.339098 °		
DWR ID DWR_RD2062_02_s _ 2018_15								
	Comment Code							

Inspector Comment

Unauthorized installation.

LM Start	0.57	Rating **	U	Issue No.	15 (cont)
LM End	0.57	Issue Type +	En	Location *	CR

Photo 2 of 4 : SP_2018_RD2062_310_15_20180523_00028.jpg

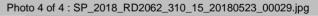
Looking northeast at pipes on waterward slope. (Spring 2018)

Photo 3 of 4: SP_2018_RD2062_310_15_20180523_00026.jpg



Looking east at pipes on waterward slope. (Spring 2018)

LM Start	0.57	Rating **	U	Issue No.	15 (cont)
LM End	0.57	Issue Type +	En	Location *	CR





Looking south at ramp on levee crown. (Spring 2018)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.75	Rating **	М	Issue No.		17		
LM End	0.75	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UC	IP Field Study		37.78613	o°	37.786130°		
пеш				-121.34156	4°	-121.341564°		
DWR ID								

Comment Code

Inspector Comment

FS_ID:23181 DS_ID:19192 EP_NO: 12427

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - no siphon breaker found- levee toe erosion under walkway on waterside.- erosion around concrete standpipe on

landside- may be base of the standpipe was leaking.

FIELD_STRÚCT_DESC: 18-inch irrigation discharge pipe of an unknown material through the levee, 4.4 feet below the crown. Pump house on the waterside (WS) slope. Metal walkway from the pump house to the crown. Service pole on the WS. Flap gate, siphon breaker, and concrete distribution box on the landside (LS) slope. (Emergency plans to replace an existing 18-inch discharge pipe through the levee authorized under Permit No. 12427, 1978 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007, 16-inch pipe referenced. USACE San Joaquin O&M Manual 9, April 1964, (HLM 0.76)].

FS Date: 10/23/2013

LM Start	0.75	Rating **	М	Issue No.	17 (cont)
LM End	0.75	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_23181_39792.jpg



WS view: pipe, walkway, service pole, and pumphouse on levee slope.

Photo 2 of 3: UCIP_SP_2018_23181_39791.jpg



WS view: leaky slant pump in pumphouse on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.75	Rating **	М	Issue No.		17 (cont)
LM End	0.75	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	IP Field Study		37.7861	30°	37.786130 °
пеш				-121.3415	64 °	-121.341564 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:23181 DS_ID:19192 EP_NO: 12427

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - no siphon breaker found- levee toe erosion under walkway on waterside.- erosion around concrete standpipe on

landside- may be base of the standpipe was leaking.

FIELD_STRUCT_DESC: 18-inch irrigation discharge pipe of an unknown material through the levee, 4.4 feet below the crown. Pump house on the waterside (WS) slope. Metal walkway from the pump house to the crown. Service pole on the WS. Flap gate, siphon breaker, and concrete distribution box on the landside (LS) slope. (Emergency plans to replace an existing 18-inch discharge pipe through the levee authorized under Permit No. 12427, 1978 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007, 16-inch pipe referenced. USACE San Joaquin O&M Manual 9, April 1964, (HLM 0.76)].

FS Date: 10/23/2013



WS view: oil leakage from slant pump. Pipe under pump house.

LM Start	1.37	Rating **	U	Issue No.		14
LM End	1.37	Issue Type +	Ma	Location *		CR
Category	Category Interior Drainage & Piping					e/Longitude
Category	Systems			Start	End	
Item	Encroach	ments		37.791772°		37.791772°
itom				-121.3504	15 °	-121.350415°
DWR ID	R ID DWR_RD2062_02_s _ 2018_14					
Comment Code						

Inspector Comment

Owner installed pipe across levee crown.



Photo 1 of 4: SP_2018_RD2062_310_14_20180523_00031.jpg

Looking east at pumphouse and pipe on waterward slope. (Spring 2018)

05/22/2018

Location Rating Issue Type LS: Land Side Ma : Maintenance Deficiency N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.37	Rating **	U	Issue No.		14 (cont)		
LM End	1.37	Issue Type +	Ma	Location *		CR		
Category	rainage & Pipi	GPS Latitude/Longitude						
Calegory	Systems		Start		End			
Item	Encroach	ments		37.7917	72 °	37.791772°		
пеш				-121.3504 ⁻	15°	-121.350415 °		
DWR ID DWR_RD2062_02_s _ 2018_14								
	Comment Code							

Inspector Comment

Owner installed pipe across levee crown.

LM Start	1.37	Rating **	U	Issue No.	14 (cont)
LM End	1.37	Issue Type +	Ma	Location *	CR



Looking south at installation (pipe) on landward slope. (Spring 2018)

Photo 3 of 4: SP_2018_RD2062_310_14_20180523_00030.jpg



Looking west at installation (pipe) on landward slope. (Spring 2018)

LM Start	1.37	Rating **	U	Issue No.	14 (cont)
LM End	1.37	Issue Type +	Ма	Location *	CR





Looking south at installation (pipe) on waterward slope. (Spring 2018)

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.37	Rating **	М	Issue No.		18	
LM End	1.37	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		37.79182	21 °	37.791821	
пеш				-121.3504	48 °	-121.350448 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:51468 DS_ID:19193 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 04/05/2017:Pipe has been plugged as a flood fight measure and is likely to be replaced under a permit. MBK (Michael Moncrief) is working on the permit. Photo and update courtesy of Max Khashchuk as part of his 2017 Spring Inspection. (K. Fazel - UCIP)10/22/2013:- pumphouse on concrete sump in the channel.-erosion under walkway on waterside. (P. Amatya - DWR) FIELD_STRUCT_DESC: 20-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Pump house on the waterside (WS) slope. Metal walkway from the pump house to the crown. Flap gate, siphon breaker, and concrete distribution box on the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 2007, 18-inch pipe referenced. USACE San Joaquin O&M Manual 9, April 1964, (HLM 1.40), 18-inch pipe referenced].

LM Start	1.37	Rating **	М	Issue No.	18 (cont)
LM End	1.37	Issue Type +	En	Location *	



WS view: pipe, walkway, and pumphouse on levee berm. Service pole on waterside.

Photo 2 of 3: UCIP_SP_2018_51468_39194.jpg



WS view: leaky pump and control box in pumphouse.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.37	Rating **	М	Issue No.		18 (cont)
LM End	1.37	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		37.79182	1°	37.791821 °
пеш				-121.35044	3°	-121.350448 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51468 DS_ID:19193 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 04/05/2017:Pipe has been plugged as a flood fight measure and is likely to be replaced under a permit. MBK (Michael Moncrief) is working on the permit. Photo and update courtesy of Max Khashchuk as part of his 2017 Spring Inspection. (K. Fazel - UCIP)10/22/2013:- pumphouse on concrete sump in the channel.-erosion under walkway on waterside. (P. Amatya - DWR) FIELD_STRUCT_DESC: 20-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Pump house on the waterside (WS) slope. Metal walkway from the pump house to the crown. Flap gate, siphon breaker, and concrete distribution box on the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 2007, 18-inch pipe referenced. USACE San Joaquin O&M Manual 9, April 1964, (HLM 1.40), 18-inch pipe referenced].



WS view: exposed steel pipe under walkway. Soil erosion under walkway. This may be due to leaky pipe joint.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.64	Rating **	U	Issue No.		19		
LM End	1.64	Issue Type +	En	Location *		Location *		
Category	Suppleme	ental		GPS Lat	e/Longitude			
Calegory				Start		End		
Item	DWR UC	IP Field Study		37.79400	9°	37.794009°		
пеш				-121.35441	7 °	-121.354417°		
DWR ID								

Comment Code

Inspector Comment

FS_ID:50452 DS_ID:19194 EP_NO: 4305 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 08/31/2016: Heavy sloughing and sink hole remains at the WS slope in alignment with pipe. Though sloughing is not affecting levee prism, it is still an indication of a pipe integrity problem. Oil leak at the pump but does not appear to impact the levee. (K. Fazel - UCIP)10/22/2013:- missing roof in pump house.- no protection for siphon breaker- huge erosion under pumphouse and

levee slope on waterside. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 1 of 2: 18-inch steel irrigation discharge pipe through the levee, 4.8 feet below the crown. Pump house on the waterside (WS) slope. Siphon breaker on the landside (LS) shoulder. Service pole on the LS shoulder. Concrete distribution box at the LS toe. (Plans for installation of two irrigation pumps on the bank to replace an old centrifugal pumping plant at the same location authorized under Permit No. 4305, 1963 - Reclamation District No. 2062) [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 1.67)].

FS Date: 8/31/2016

LM Start	1.64	Rating **	U	Issue No.	19 (cont)
LM End	1.64	Issue Type +	En	Location *	



WS view: pipes, walkway, and pumphouse with missing roof (right).

Photo 2 of 3: UCIP_SP_2018_50452_39186.jpg



WS view: walkway to pumphouse. Walkway in poor condition.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.64	Rating **	U	Issue No.		19 (cont)	
LM End	1.64	Issue Type +	En	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UCI	P Field Study	37.7940	09°	37.794009°		
пеш				-121.3544	17°	-121.354417 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:50452 DS_ID:19194 EP_NO: 4305 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 08/31/2016: Heavy sloughing and sink hole remains at the WS slope in alignment with pipe. Though sloughing is not affecting levee prism, it is still an indication of a pipe integrity problem. Oil leak at the pump but does not appear to impact the levee. (K. Fazel - UCIP)10/22/2013:- missing roof in pump house.- no protection for siphon breaker- huge erosion under pumphouse and levee slope on waterside. (P. Amatya - DWR) FIELD_STRUCT_DESC: 1 of 2: 18-inch steel irrigation discharge pipe

FIELD_STRUCT_DESC: 1 of 2: 18-inch steel irrigation discharge pipe through the levee, 4.8 feet below the crown. Pump house on the waterside (WS) slope. Siphon breaker on the landside (LS) shoulder. Service pole on the LS shoulder. Concrete distribution box at the LS toe. (Plans for installation of two irrigation pumps on the bank to replace an old centrifugal pumping plant at the same location authorized under Permit No. 4305, 1963 - Reclamation District No. 2062) [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 1.67)].

FS Date: 8/31/2016



WS view: two leaky slant pumps in pumphouse with miissing roof.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.64	Rating **	U	Issue No.		20	
LM End	1.64	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory	Category		Start		End		
Item	DWR UC	IP Field Study		37.79401	4 °	37.794014°	
пеш				-121.35443	84 °	-121.354434 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:50454 DS_ID:19197 EP_NO: 4305 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 08/31/2016: Heavy sloughing and sink hole remains at the WS slope in alignment with pipes. Though sloughing is not affecting levee prism, it is still an indication of a pipe integrity problem. Oil leak at the pump but does not appear to impact levee. (K. Fazel - UCIP)10/22/2013:- missing roof in pump house.- no protection for siphon breaker- huge erosion under pumphouse and levee slope on waterside. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 2 of 2: 18-inch steel irrigation discharge pipe through the levee, 4.8 feet below the crown. Pump house on the waterside (WS) slope. Siphon breaker on the landside (LS) shoulder. Service pole on the LS shoulder. Concrete distribution box at the LS toe. (Plans for installation of two irrigation pumps on the bank to replace an old centrifugal pumping plant at the same location authorized under Permit No. 4305, 1963 - Reclamation District No. 2062) [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 1.67)].

FS Date: 8/31/2016

LM Start	1.64	Rating **	U	Issue No.	20 (cont)
LM End	1.64	Issue Type +	En	Location *	



WS view: pipes, walkway, and pumphouse with missing roof (right).

Photo 2 of 3: UCIP_SP_2018_50454_39175.jpg



WS view: walkway in poor condition, to pumphouse.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.64	Rating **	U	Issue No.		20 (cont)
LM End	1.64	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		37.7940	14°	37.794014°
пеш				-121.35443	34 °	-121.354434 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:50454 DS_ID:19197 EP_NO: 4305 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 08/31/2016: Heavy sloughing and sink hole remains at the WS slope in alignment with pipes. Though sloughing is not affecting levee prism, it is still an indication of a pipe integrity problem. Oil leak at the pump but does not appear to impact levee. (K. Fazel - UCIP)10/22/2013:- missing roof in pump house.- no protection for siphon breaker- huge erosion under pumphouse and levee slope on waterside. (P. Amatya - DWR)

FIELD_STRUCT_DÉSC: 2 of 2: 18-inch steel irrigation discharge pipe through the levee, 4.8 feet below the crown. Pump house on the waterside (WS) slope. Siphon breaker on the landside (LS) shoulder. Service pole on the LS shoulder. Concrete distribution box at the LS toe. (Plans for installation of two irrigation pumps on the bank to replace an old centrifugal pumping plant at the same location authorized under Permit No. 4305, 1963 - Reclamation District No. 2062) [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 1.67)].

FS Date: 8/31/2016



WS view: two leaky slant pumps in pumphouse with miissing roof.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	3.24	Rating **	М	Issue No.		21	
LM End	3.24	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UC	IP Field Study		37.80477	o°	37.804770°	
пеш				-121.37967)°	-121.379679°	
DWR ID							

Comment Code

Inspector Comment

FS_ID:23304 DS_ID:19199 EP_NO: 11524

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - waterside pipe immersed into channel water.most of the pipe on landside exposed and siphon breaker on waterside

not protected.

FIELD_STRUCT_DESC: 1 of 3: 24-inch coated steel drainage discharge pipe through the levee, 2 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on a steel platform in a drainage ditch, 350 feet from the levee centerline off the landward berm. (Plans to install a drainage pump and 24-inch discharge line through the levee at existing main drainage pump authorized under Permit No. 11524, 1976 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 3.29)].

FS Date: 10/22/2013

LM Start	3.24	Rating **	М	Issue No.	21 (cont)
LM End	3.24	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_23304_40147.jpg



WS view: 24-inch steel pipe (left) with siphon breaker on levee slope. 18inch pipe on right.

Photo 2 of 3: UCIP_SP_2018_23304_40146.jpg



WS view: leaky siphon breaker on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	3.24	Rating **	M	Issue No.		21 (cont)
LM End	3.24	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titude	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		37.80477	'0°	37.804770 °
пеш				-121.37967	'9 °	-121.379679 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:23304 DS_ID:19199 EP_NO: 11524

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - waterside pipe immersed into channel water.most of the pipe on landside exposed and siphon breaker on waterside not protected.

FIELD_STRUCT_DESC: 1 of 3: 24-inch coated steel drainage discharge pipe through the levee, 2 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on a steel platform in a drainage ditch, 350 feet from the levee centerline off the landward berm. (Plans to install a drainage pump and 24-inch discharge line through the levee at existing main drainage pump authorized under

Permit No. 11524, 1976 - Reclamation District No. 2062). [Additional

Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 3.29)].

FS Date: 10/22/2013



LS view: overview of pipes on levee berm and pump platform (marked - right) off the berm 350 ft from the levee.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	3.24	Rating **	М	Issue No.		22	
LM End	3.24	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		37.8047	77 °	37.804777	0
пеш				-121.3797	04 °	-121.379704	0
DWR ID							

Comment Code

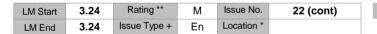
Inspector Comment

FS_ID:23023 DS_ID:19198 EP_NO: 11524

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - 18-inch pipe bifurcated near the pump and two gate valves installed.- waterside pipe immersed into channel water.- most of the pipe on landside exposed and siphon breaker on waterside not protected.

FIELD_STRUCT_DESC: 2 of 3: 18-inch coated steel drainage discharge pipe through the levee, 4 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on a steel platform in a drainage ditch, 350 feet from the levee centerline off the landward berm. (Plans to install a drainage pump and 24-inch discharge line through the levee at existing main drainage pump authorized under Permit No. 11524, 1976 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 3.29), 16-inch pipe referenced]. FS Date: 10/22/2013





WS view: exposed 18-inch pipe with siphon breaker on levee slope. Exposed 24-inch pipe (left).

Photo 2 of 3: UCIP_SP_2018_23023_39081.jpg



WS view: closer view of 18-inch pipe with siphon breaker on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	3.24	Rating **	M	Issue No.		22 (cont)
LM End	3.24	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Long			
Calegory				Start		End
Item	DWR UC	IP Field Study		37.80477	7 °	37.804777°
пеш				-121.37970	4 °	-121.379704°
DWR ID						

Comment Code

Inspector Comment

FS_ID:23023 DS_ID:19198 EP_NO: 11524

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - 18-inch pipe bifurcated near the pump and two gate valves installed.- waterside pipe immersed into channel water.- most of the pipe on landside exposed and siphon breaker on waterside not protected.

FIELD_STRUCT_DESC: 2 of 3: 18-inch coated steel drainage discharge pipe through the levee, 4 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on a steel platform in a drainage ditch, 350 feet from the levee centerline off the landward berm. (Plans to install a drainage pump and 24-inch discharge line through the levee at existing main drainage pump authorized under Permit No. 11524, 1976 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 3.29), 16-inch pipe referenced]. FS Date: 10/22/2013



LS view: overview of exposed pipes and pump station (marked- right) 350 ft from levee center.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	3.24	Rating **	М	Issue No.		23
LM End	3.24	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	e/Longitude	
Calegory				Start		End
Item	DWR UC	IP Field Study		37.80478	7°	37.804787 °
пеш				-121.37973	4 °	-121.379734°
DWR ID						

Comment Code

Inspector Comment

FS_ID:23305 DS_ID:19195 EP_NO: 11524

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - no associated pump or any other appurtenances found on landside.- looks abandoned pipe. Needs proper

abandonment.

FIELD_STRUCT_DESC: 3 of 3: 24-inch coated steel drainage discharge pipe through the levee, 2 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on a steel platform in a drainage ditch, 350 feet from the levee centerline off the landward berm. (Plans to install a drainage pump and 24-inch discharge line through the levee at existing main drainage pump authorized under Permit No. 11524, 1976 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 3.29)].

FS Date: 10/22/2013

LM Start	3.24	Rating **	М	Issue No.	23 (cont)
LM End	3.24	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_23305_40153.jpg



WS view: siphon breaker in steel pipe riser on levee slope.

Photo 2 of 3: UCIP_SP_2018_23305_40152.jpg



WS view: closer view of siphon breaker in steel pipe riser on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	3.24	Rating **	M	Issue No.		23 (cont)
LM End	3.24	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/L		e/Longitude	
Calegory				Start		End
Item	DWR UC	IP Field Study		37.80478	7 °	37.804787 °
пеш				-121.37973	4 °	-121.379734°
DWR ID						

Comment Code

Inspector Comment

FS ID:23305 DS_ID:19195 EP NO: 11524

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - no associated pump or any other appurtenances

found on landside.- looks abandoned pipe. Needs proper

abandonment.

FIELD_STRUCT_DESC: 3 of 3: 24-inch coated steel drainage discharge pipe through the levee, 2 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on a steel platform in a drainage ditch, 350 feet from the levee centerline off the landward berm. (Plans to install a drainage pump and 24-inch discharge line through the levee at existing main drainage pump authorized under Permit No. 11524, 1976 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 3.29)].

FS Date: 10/22/2013

Photo 3 of 3: UCIP_SP_2018_23305_40151.jpg



WS view: exposed pipe and steel pipe riser on levee slope.

LM Start	3.64	Rating **	М	Issue No.		8	
LM End	3.64	Issue Type +	Ма	Location *		WS	
Category	Earthen L	Levee GPS Latit			atitud	e/Longitude	
Calegory				Start		End	
Item	Erosion /	Bank Caving		37.8063	47°	37.806347	0
пеш				-121.386692 °		-121.386692	٥
DWR ID	DWR_RD2	062_02_s _ 201	4_8				

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Photo 1 of 1: SP_2018_RD2062_310_8_20180503_00001.jpg



View of the erosion from surface runoff on the waterside levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	05/22/2018 05/22/2018	Richard Willoughby

LM Start	3.95	Rating **	М	Issue No.		12
LM End	3.95	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroachments			37.8091	60°	37.809160 °
пеш	item				127°	-121.390427 °
DWR ID DWR_RD2062_02_s _ 2018_12						
		Comn	nent Cod	le		
TR : Tree or limb						
Inspector Comment						
Fallen tree on landward slope.						

Photo 1 of 1: SP_2018_RD2062_310_12_20180523_00034.jpg

Looking at broken tree branch on landward slope. (Spring 2018)

Unit Cover Sheet

Spring 2018 Levee Inspection Results

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles
Unit No. 03 Old River	Left	5.55

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	5/22/2018 - 5/22/2018			
DWR Inspector	Richard Willoughby			
Accompanied By	John Hale RD2062			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	-0.03	Rating **	М	Issue No.		1	
LM End	0.07	Issue Type +	Ма	Location *	WS		
Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	DWR Erosion Survey			37.80951	4 °	37.809514	0
пеш				-121.39012	5°	-121.390125	0
DWR ID	RD2062U0	3RM29.94					

Inspector Comment

Comment Code

09/13/2017: The erosion site has expanded significantly along the river bank.

11/09/2016: No significant change observed. 06/25/2015: The erosion is below a large oak tree. Vegetation is visible around the erosion site. [2017 Site ID:RD2062U03RM29.94]

LM Start	-0.03	Rating **	М	Issue No.	1 (cont)
LM End	0.07	Issue Type +	Ma	Location *	WS

Photo 1 of 4: SP_2018_RD2062_311_1_20180503_00001.jpg



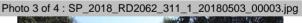
Front view of the erosion site. Note the large tree above the erosion.

Photo 2 of 4: SP_2018_RD2062_311_1_20180503_00002.jpg



Close view of the erosion.

LM Start	-0.03	Rating **	М	Issue No.	1 (cont)
LM End	0.07	Issue Type +	Ma	Location *	WS





Close view of the erosion.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	-0.03	Rating **	М	Issue No.		1 (cont)
LM End	0.07	Issue Type +	Ма	Location *		WS
Supplemental				GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR Erosion Survey			37.8095	14°	37.809514°
nem				-121.3901	25 °	-121.390125 °
DWR ID	RD2062U0	3RM29.94				

Comment Code

Inspector Comment

09/13/2017: The erosion site has expanded significantly along the river bank.

11/09/2016: No significant change observed. 06/25/2015: The erosion is below a large oak tree. Vegetation is visible around the erosion site. [2017 Site ID:RD2062U03RM29.94]

Close view of the erosion.

LM Start	0.00	Rating **	М	Issue No.		15	
LM End	5.55	Issue Type +	Ма	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Vegetation			37.809297°		37.807505 °		
Item				-121.390322 °		-121.328103 °	
DWR ID DWR_RD2062_03_s _ 2018_15							
Comment Code							

Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

LM Start	0.00	Rating **	М	Issue No.	16			
LM End	5.55	Issue Type +	Ма	Location *	WS			
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory		Start		End				
Item	Vegetation			37.80929	97°	37.807505	0	
item		-121.3903	22 °	-121.328103	0			
DWR ID DWR_RD2062_03_s _ 2018_16								
Comment Code								

V1: Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.09	0.09 Rating ** U		Issue No.		2	
LM End	0.11	Issue Type + Ma		Location *		WS	
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory			Start		End		
DWR Erosion Survey				37.8099	32°	37.809932 °	
пеш				-121.3887	88 °	-121.388788 °	
DWR ID	RD2062U03RM30.02						

Inspector Comment

Comment Code

09/13/2017: The erosion site has expanded significantly with the erosion length increased to approximately 90 ft from 40 ft. Signs of animal activities have been found at the site.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: Hard to view the erosion because of the dense vegetation and trees on site. The site is under the bush, close to the tree. [2017 Site ID:RD2062U03RM30.02]

LM Start	0.09	Rating **	U	Issue No.	2 (cont)	
LM End	0.11	Issue Type +	Ma	Location *	WS	

Photo 1 of 4: SP_2018_RD2062_311_2_20180503_00005.jpg



Front view of the site.

Photo 2 of 4: SP_2018_RD2062_311_2_20180503_00006.jpg



Close view of the erosion. Note signs of animal activities at the site..

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.09	0.09 Rating ** U		Issue No.		2 (cont)	
LM End	0.11	Issue Type +	pe + Ma Location *			WS	
Category	Suppleme	ental	GPS Latitude/Longi			e/Longitude	
Calegory			Start		End		
Item	DWR Erosion Survey				2°	37.809932°	
пеш				-121.38878	8°	-121.388788 °	
DWR ID	RD2062U03RM30.02						

Comment Code

Inspector Comment

09/13/2017: The erosion site has expanded significantly with the erosion length increased to approximately 90 ft from 40 ft. Signs of animal activities have been found at the site.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: Hard to view the erosion because of the dense vegetation and trees on site. The site is under the bush, close to the tree. [2017 Site ID:RD2062U03RM30.02]

LM Start	0.09	Rating **	U	Issue No.	2 (cont)
LM End	0.11	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : SP_2018_RD2062_311_2_20180503_00007.jpg



Close view of the erosion.

Photo 4 of 4: SP_2018_RD2062_311_2_20180503_00008.jpg



Close view of the erosion.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.17	Rating **	М	Issue No.		3
LM End	0.17	Issue Type +	Ма	Location *	WS	
Category Supplemental			GPS Latitude/Longitude			
Calegory	Calegory			Start		End
Item	DWR Ero	sion Survey		37.81026	8°	37.810268°
пеш				-121.38749	5°	-121.387495°
DWR ID	DWR_RD2	062_03_s _ 201	8_3			

Comment Code

Inspector Comment

09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The protection at the levee toe has been washed away.

[2017 Site ID:RD2062U03RM30.1]

LM Start	0.17	Rating **	М	Issue No.	3 (cont)
I M End	0.17	Issue Type +	Ma	Location *	WS

Photo 1 of 3: SP_2018_RD2062_311_3_20180503_00009.jpg



Direct view of the site.

Photo 2 of 3: SP_2018_RD2062_311_3_20180503_00010.jpg



Close view of the erosion.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.17	Rating **	М	Issue No.		3 (cont)		
LM End	0.17	Issue Type +	Ma	Location *		Location *		WS
Category Supplemental			GPS Latitude/Longitude					
			Start		End			
Item	DWR Ero	sion Survey		37.8102	68°	37.810268°		
пеш			-121.3874	95 °	-121.387495 °			
DWR ID DWR_RD2062_03_s _ 2018_3								
Comment Code								

Inspector Comment

09/13/2017: No significant change observed. 07/25/2016: No significant change observed. 06/25/2015: No significant change observed.

07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The protection at the levee toe has been washed away.

[2017 Site ID:RD2062U03RM30.1]

Photo 3 of 3: SP_2018_RD2062_311_3_20180503_00011.jpg



Close view of the erosion.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.22	Rating **	U	Issue No.		4	
LM End	0.31	Issue Type +	Ма	Location *		WS	
Category Supplemental			GPS Latitude/Longitude				
			Start		End		
Item	DWR Ero	sion Survey		37.8106	09°	37.810609°	
пеш			-121.3858	79°	-121.385879 °		
DWR ID	RD2062U0	3RM30.19					
Comment Code							

Inspector Comment

09/13/2017: The erosion has developed vertically. More vegetaion at the site.

07/25/2106: No significant change observed. More vegetation observed at the site.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: A new pocket erosion at the upper levee slope has been found directly above a large tree. The erosion might have been caused by internal pipe leakage or surface runoff.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site. Dense vegetation is visible along the water line.

09/07/2010: No significant change observed on site. Much of the upper slope was recently cleared of vegetation by spraying. 4- to 6-foot vertical scarp and pocket erosions are lined along a span of 475 feet. In some sections, the vertical scarp encroaches into the levee prism. There is a lack of berm along this reach, exposing the levee slope to

high flow velocities during normal and flood events. 08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: As discussed with Michael Moncrief of MBK Engineers, the

site will be 'addressed' later this year.
09/29/2009: No major change observed since last visit; pocket erosion and a vertical scarp forming; this site was combined with Site RM30.13 and 30.02 with a combined total erosion length of 475 feet; recommended as annual assessment and monitoring of the site, per

CLRO CES Evaluation 2008 Report; previously rated "M". 11/05/2008: Top of vertical scarp has rip rap that appears to be sliding; rodent holes; existing toe rip rap. [2017 Site ID:RD2062U03RM30.19]

Photo 1 of 4: SP_2018_RD2062_311_4_20180503_00012.jpg



View of the pocket erosion.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.22	Rating **	U	Issue No.		4 (cont)				
LM End	0.31	Issue Type +	Ма	Location *		Location *		Location *		WS
Category Supplemental			GPS Latitude/Longitude							
			Start		End					
Item	DWR Ero	sion Survey		37.81060	9°	37.810609°				
пеш			-121.3858	79°	-121.385879 °					
DWR ID	RD2062U0	3RM30.19								
Comment Code										

Inspector Comment

09/13/2017: The erosion has developed vertically. More vegetaion at the site.

07/25/2106: No significant change observed. More vegetation observed at the site.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: A new pocket erosion at the upper levee slope has been found directly above a large tree. The erosion might have been caused by internal pipe leakage or surface runoff.

08/07/2012. The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site. Dense vegetation is visible along the water line.

09/07/2010: No significant change observed on site. Much of the upper slope was recently cleared of vegetation by spraying. 4- to 6-foot vertical scarp and pocket erosions are lined along a span of 475 feet. In some sections, the vertical scarp encroaches into the levee prism.

There is a lack of berm along this reach, exposing the levee slope to high flow velocities during normal and flood events.

08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: As discussed with Michael Moncrief of MBK Engineers, the site will be 'addressed' later this year.

09/29/2009: No major change observed since last visit; pocket erosion and a vertical scarp forming; this site was combined with Site RM30.13 and 30.02 with a combined total erosion length of 475 feet; recommended as annual assessment and monitoring of the site, per

CLRO CES Evaluation 2008 Report; previously rated "M".

11/05/2008: Top of vertical scarp has rip rap that appears to be sliding; rodent holes; existing toe rip rap. [2017 Site ID:RD2062U03RM30.19]

Photo 2 of 4: SP_2018_RD2062_311_4_20180503_00013.jpg



Close view of the pocket erosion. Note the dense vegetation at the site.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.22	Rating **	U	Issue No.		4 (cont)		
LM End	0.31	Issue Type +	Ма	Location *		WS		
Category Supplemental			GPS La	tituc	le/Longitude			
			Start		End			
Item	DWR Ero	sion Survey		37.81060)9°	37.810609		
пеш			-121.38587	'9	-121.385879			
DWR ID	RD2062U0	3RM30.19						
	Comment Code							

Inspector Comment

09/13/2017: The erosion has developed vertically. More vegetaion at the site.

07/25/2106: No significant change observed. More vegetation observed at the site.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: A new pocket erosion at the upper levee slope has been found directly above a large tree. The erosion might have been caused by internal pipe leakage or surface runoff.

08/07/2012. The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site. Dense vegetation is visible along the water line.

09/07/2010: No significant change observed on site. Much of the upper slope was recently cleared of vegetation by spraying. 4- to 6-foot vertical scarp and pocket erosions are lined along a span of 475 feet. In some sections, the vertical scarp encroaches into the levee prism.

There is a lack of berm along this reach, exposing the levee slope to high flow velocities during normal and flood events.

08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: As discussed with Michael Moncrief of MBK Engineers, the site will be 'addressed' later this year.

09/29/2009: No major change observed since last visit; pocket erosion and a vertical scarp forming; this site was combined with Site RM30.13 and 30.02 with a combined total erosion length of 475 feet; recommended as annual assessment and monitoring of the site, per

CLRO CES Evaluation 2008 Report; previously rated "M".

11/05/2008: Top of vertical scarp has rip rap that appears to be sliding; rodent holes; existing toe rip rap. [2017 Site ID:RD2062U03RM30.19]

Photo 3 of 4: SP_2018_RD2062_311_4_20180503_00014.jpg



Front view of the site with dense vegetation.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.22	Rating **	U	Issue No.		4 (cont)	
LM End	0.31	Issue Type +	Ма	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR Erosion Survey			37.81060	9°	37.810609	0
пеш				-121.385879 °		-121.385879	0
DWR ID	RD2062U0	3RM30.19					

Inspector Comment

Comment Code

09/13/2017: The erosion has developed vertically. More vegetaion at the site.

07/25/2106: No significant change observed. More vegetation observed at the site.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: A new pocket erosion at the upper levee slope has been found directly above a large tree. The erosion might have been caused by internal pipe leakage or surface runoff.

08/07/2012. The site has been visited by boat survey. No significant change observed

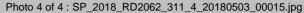
08/23/2011: No significant change observed on site. Dense vegetation is visible along the water line.

09/07/2010: No significant change observed on site. Much of the upper slope was recently cleared of vegetation by spraying. 4- to 6-foot vertical scarp and pocket erosions are lined along a span of 475 feet. In some sections, the vertical scarp encroaches into the levee prism. There is a lack of berm along this reach, exposing the levee slope to

high flow velocities during normal and flood events. 08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: As discussed with Michael Moncrief of MBK Engineers, the site will be 'addressed' later this year.

09/29/2009: No major change observed since last visit; pocket erosion and a vertical scarp forming; this site was combined with Site RM30.13 and 30.02 with a combined total erosion length of 475 feet; recommended as annual assessment and monitoring of the site, per

recommended as annual assessment and monitoring of the site, per CLRO CES Evaluation 2008 Report; previously rated "M".





Front view of the site. The erosion has developed along the levee slope.

OLIVO OLO L'Valdation 2000 Report, previously rated in .
11/05/2008: Top of vertical scarp has rip rap that appears to be sliding;
rodent holes; existing toe rip rap. [2017 Site ID:RD2062U03RM30.19]

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.35	Rating **	М	Issue No.		5		
LM End	0.35	Issue Type +	Ма	Location *		WS		
Category	Supplemental			GPS Latitude/Longitude				
Category			Start		End			
Item	DWR Erosion Survey			37.8111	01 °	37.811101°		
пеш				-121.3844	02 °	-121.384402°		
DWR ID	RD2062U0	3RM30.27						

Inspector Comment

Comment Code

09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The site is right at the downstream of a river bend. [2017 Site ID:RD2062U03RM30.27]

LM Start	0.35	Rating **	М	Issue No.	5 (cont)
LM End	0.35	Issue Type +	Ma	Location *	WS

Photo 1 of 3: SP_2018_RD2062_311_5_20180503_00016.jpg



Front view of the erosion.

Photo 2 of 3: SP_2018_RD2062_311_5_20180503_00017.jpg



Close view of the site. Note the dense vegetation at the site.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.35	Rating **	М	Issue No.		5 (cont)	
LM End	0.35	Issue Type +	Ма	Location *		WS	
Category Supplemental			GPS Latitude/Longitude				
Calegory			Start		End		
Item	DWR Ero	sion Survey		37.81110	11 °	37.811101 °	
пеш				-121.38440	2 °	-121.384402 °	
DWR ID	RD2062U0	3RM30.27					

Comment Code

Inspector Comment

09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

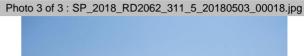
07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant

change observed

08/23/2011: The site is right at the downstream of a river bend. [2017

Site ID:RD2062U03RM30.27]





Front view of the erosion.

LM Start	0.51	Rating **	М	Issue No.		38			
LM End	0.51	Issue Type +	Ма	Location *	LS				
Category	Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End			
Item	Erosion / Bank Caving			37.8125	52°	37.812552			
пеш				-121.3827	81 °	-121.382781			
DWR ID	DWR_RD2	062_03_s _ 201	6_38						

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Photo 1 of 1: SP_2018_RD2062_311_38_20180503_00036.jpg



View of the landside levee slope erosion around the pipe.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.51	Rating **	U	Issue No.		39		
LM End	0.51	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UC	IP Field Study		37.81257	5°	37.812575 °		
пеш				-121.38279	3°	-121.382798 °		
DWR ID								

Comment Code

Inspector Comment

FS_ID:50455 DS_ID:19200 EP_NO: 2029 Repair Type: Urgent Crossing Status: Found

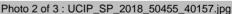
UCIP Comments: 08/31/2016: Sloughing of LS slope beneath exposed section of pipe. Overflow pipe has been replaced on WS, though I could not locate a permit for that work. (K. Fazel - UCIP)10/22/2013:- pits and holes on overflow pipe on waterside.- underpinning at pump support.- slope erosion on both sides of the levee.- 2-inch electric conduit on waterside and power pole on landside. (P. Amatya - DWR) FIELD_STRUCT_DESC: 16-inch coated steel irrigation discharge pipe through the levee, 8 feet below the crown. Siphon breaker on the landside (LS) slope. Pump house on the waterside (WS) slope. Concrete distribution box on the LS. 2-inch electrical conduit on the WS. Service pole on the LS. Newly installed, as of 2016, overflow pipe with shutoff valve on the WS. (Plans for installation of an inclined irrigation pump on the bank authorized under Permit No. 2029, 1954 -Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 0.52)].

FS Date: 8/31/2016

LM Start	0.51	Rating **	U	Issue No.	39 (cont)
LM End	0.51	Issue Type +	En	Location *	



WS view: pump house on levee slope and soil erosion on levee slope.





WS view: pump house on levee slope and holes-pits on corroded overflow pipe (left).

Location Rating Issue Type LS: Land Side Ma : Maintenance Deficiency N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.51	Rating **	U	Issue No.		39 (cont)		
LM End	0.51	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory						End		
Item	DWR UC	IP Field Study		37.8125	75 °	37.812575°		
пеш			,		98 °	-121.382798°		
DWR ID								

Comment Code

Inspector Comment

FS_ID:50455 DS_ID:19200 EP_NO: 2029 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 08/31/2016: Sloughing of LS slope beneath exposed section of pipe. Overflow pipe has been replaced on WS, though I could not locate a permit for that work. (K. Fazel - UCIP)10/22/2013:- pits and holes on overflow pipe on waterside.- underpinning at pump support.- slope erosion on both sides of the levee.- 2-inch electric conduit on waterside and power pole on landside. (P. Amatya - DWR) FIELD_STRUCT_DESC: 16-inch coated steel irrigation discharge pipe through the levee, 8 feet below the crown. Siphon breaker on the landside (LS) slope. Pump house on the waterside (WS) slope. Concrete distribution box on the LS. 2-inch electrical conduit on the WS. Service pole on the LS. Newly installed, as of 2016, overflow pipe with shutoff valve on the WS. (Plans for installation of an inclined irrigation pump on the bank authorized under Permit No. 2029, 1954 -Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 0.52)].

FS Date: 8/31/2016

Photo 3 of 3: UCIP_SP_2018_50455_40156.jpg



WS view: slant pump in pumphouse on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.55	Rating **	М	Issue No.		7	
LM End	0.56	Issue Type +	Ма	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR Ero	sion Survey		37.81307	o°	37.813070	
пеш	item		-121.38310	o°	-121.383100		
DWR ID	RD2062U0	3RM30.43					

Comment Code

Inspector Comment

09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed.

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. Much of the placed rip rap revetment has slid. It is no longer adequately protecting the slope.

08/06/2010: Recommended as local maintenance issue, per CLRO Report.

03/09/2010: As discussed with Michael Moncrief of MBK, site will be 'addressed' this year.

09/29/2009: No major change observed since last visit; a section of the rip rap has slipped, exposing a levee section that has eroded; recommended as local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM30.43,LM0.63; previously rated "U".

11/05/2008: Site is located inside of a bend; scarp looks to be into the levee prism; piles of concrete chunks placed on the slope, with some of them already starting to slide. [2017 Site ID:RD2062U03RM30.43]

LM Start	0.55	Rating **	М	Issue No.	7 (cont)
LM End	0.56	Issue Type +	Ma	Location *	WS

Photo 1 of 3: SP_2018_RD2062_311_7_20180503_00019.jpg



Close view of the site.

Photo 2 of 3: SP_2018_RD2062_311_7_20180503_00020.jpg



Front view of the site.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	0.55	Rating **	М	Issue No.		7 (cont)
LM End	0.56	Issue Type +	Ma	Location *		WS
Category	Supplemental			GPS Latitude/Longitude		
Calegory	У			Start		End
Item	DWR Ero	sion Survey		37.81307	70°	37.813070°
пеш			-121.38310	00°	-121.383100 °	
DWR ID	RD2062U0	3RM30.43				

Comment Code

Inspector Comment

09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed.

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. Much of the placed rip rap revetment has slid. It is no longer adequately protecting the slope.

08/06/2010: Recommended as local maintenance issue, per CLRO Report.

03/09/2010: As discussed with Michael Moncrief of MBK, site will be 'addressed' this year.

09/29/2009: No major change observed since last visit; a section of the rip rap has slipped, exposing a levee section that has eroded; recommended as local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM30.43,LM0.63; previously rated "U".

11/05/2008: Site is located inside of a bend; scarp looks to be into the levee prism; piles of concrete chunks placed on the slope, with some of them already starting to slide. [2017 Site ID:RD2062U03RM30.43]

Photo 3 of 3: SP_2018_RD2062_311_7_20180503_00021.jpg



Front view of the site.

LM Start	0.74	Rating **	U	Issue No.		22
LM End	0.76	Issue Type +	Ма	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End	
Item	Vegetatio	n		37.81526	2°	37.815557 °
item		-121.38145	5 °	-121.381562 °		
DWR ID	DWR RD2	062 03 s 201	8 22			

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



Looking southwest at dense vegetation (Tobacco plants) on waterward slope. (Spring 2018)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.18	Rating **	М	Issue No.		8	
LM End	1.19	Issue Type +	Ма	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory	У			Start		End	
Item	DWR Ero	sion Survey		37.81929	o°	37.819290°	
пеш	item		-121.37888	o°	-121.378880 °		
DWR ID	RD2062U0	3RM31.12					

Inspector Comment

Comment Code

09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. Much of the seasonal grass along the slope was cleared. Site consists of an existing scalloped erosion approximately 30 feet long by 5 feet wide at its widest opening. The lateral crack is extended outwards along the middle slope. There is a 1 to 2 feet of differential settlement that could further develop into a shallow slide.

08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: As discussed with Michael Moncrief of MBK Engineer, site will be 'addressed' this year.

09/28/2009: No major change observed; section of rip rap has slipped, creating a terraced effect; dense vegetation growth; recommended as a local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM31.12,LM1.25; previously rated "U"

09/14/2006: 1-2' into prism. [2017 Site ID:RD2062U03RM31.12]

Rating **

LM Start

LM End

1.18

1.19

				948
	ale:	400	Control Control Land	
-			The state of the state of	

Photo 1 of 3: SP_2018_RD2062_311_8_20180503_00022.jpg

Front view of the site.

М Issue No. 8 (cont) Location ' Issue Type + Ма WS

Photo 2 of 3: SP_2018_RD2062_311_8_20180503_00023.jpg



Front view of the site.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.18	Rating **	М	Issue No.		8 (cont)
LM End	1.19	Issue Type +	Ма	Location *		WS
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR Ero	sion Survey		37.81929	90°	37.819290°
пеш			-121.3788	30 °	-121.378880 °	
DWR ID	RD2062U0	3RM31.12				

Comment Code

Inspector Comment

09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. Much of the seasonal grass along the slope was cleared. Site consists of an existing scalloped erosion approximately 30 feet long by 5 feet wide at its widest opening. The lateral crack is extended outwards along the middle slope. There is a 1 to 2 feet of differential settlement that could further develop into a shallow slide.

08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: As discussed with Michael Moncrief of MBK Engineer, site will be 'addressed' this year.

09/28/2009: No major change observed; section of rip rap has slipped, creating a terraced effect; dense vegetation growth; recommended as a local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM31.12,LM1.25; previously rated "U".

09/14/2006: 1-2' into prism. [2017 Site ID:RD2062U03RM31.12]

Photo 3 of 3: SP_2018_RD2062_311_8_20180503_00024.jpg



Front view of the site.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.39	Rating **	U	Issue No.		9
LM End	1.40	Issue Type +	Ma	Location *	WS	
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR Ero	sion Survey		37.82138	0°	37.821380°
пеш				-121.37690	0°	-121.376900 °
DWR ID	RD2062U0	3RM31.28				

Comment Code

Inspector Comment

09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. There is a small- to medium sized Oak tree on the mid-slope just above rip rap. Some of the rip rap has collapsed, creating a pocket erosion just above the existing toe rip rap and upstream of the Oak tree.

08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: As discussed with Michael Moncrief of MBK Engineer, site will be 'addressed' in 2010.

09/29/2009: No major change since last visit; sliding of the rip rap at the base of the lone tree; there is noticeable man-made trail and foot traffic extending from the crown to the toe; much of the broken concrete used as temporary rip rap has slid, exposing portion of the bare levee slope; recommended as local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM31.3, LM1.45; previously rated

11/05/2008: Portion of rip rap collapsing.

09/14/2006: Portion of rip rap along the slope has collapsed; exposed levee section is starting to erode, exposing roots from the nearby tree. [2017 Site ID:RD2062U03RM31.28]

LM Start	1.39	Rating **	U	Issue No.	9 (cont)
LM End	1.40	Issue Type +	Ma	Location *	WS

Photo 1 of 4: SP_2018_RD2062_311_9_20180503_00025.jpg



Front view of the erosion site.

Photo 2 of 4: SP_2018_RD2062_311_9_20180503_00026.jpg



Close view of the site.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	1.39	Rating **	U	Issue No.		9 (cont)
LM End	1.40	Issue Type +	Ma	Location *		WS
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR Ero	sion Survey		37.8213	80°	37.821380°
пеш				-121.3769	00°	-121.376900 °
DWR ID	RD2062U0	3RM31.28				

Inspector Comment

Comment Code

09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. There is a small- to medium sized Oak tree on the mid-slope just above rip rap. Some of the rip rap has collapsed, creating a pocket erosion just above the existing toe rip rap and upstream of the Oak tree.

08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: As discussed with Michael Moncrief of MBK Engineer, site will be 'addressed' in 2010.

09/29/2009: No major change since last visit; sliding of the rip rap at the base of the lone tree; there is noticeable man-made trail and foot traffic extending from the crown to the toe; much of the broken concrete used as temporary rip rap has slid, exposing portion of the bare levee slope; recommended as local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM31.3, LM1.45; previously rated

11/05/2008: Portion of rip rap collapsing.

09/14/2006: Portion of rip rap along the slope has collapsed; exposed levee section is starting to erode, exposing roots from the nearby tree. [2017 Site ID:RD2062U03RM31.28]

LM Start	1.39	Rating **	U	Issue No.	9 (cont)
LM End	1.40	Issue Type +	Ma	Location *	WS

Photo 3 of 4: SP_2018_RD2062_311_9_20180503_00027.jpg



Front view of the site. Note the existing broken concrete on levee slope and at the levee toe.

Photo 4 of 4: SP_2018_RD2062_311_9_20180503_00028.jpg



Close view of the site.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	2.18	Rating **	М	Issue No.		20	
LM End	2.18	Issue Type +	Ма	Location *		WS	
Category	GPS Latitude/Longitude						
Calegory				Start		End	
Item	Slope Sta	bility		37.81872	5°	37.818725	0
пеш					2°	-121.363762	0
DWR ID DWR_RD2062_03_s _ 2018_20							

Comment Code

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comment

Slope damage caused by foot traffic on waterward slope.

Photo 1 of 1: SP_2018_RD2062_311_20_20180523_00053.jpg



Looking west at slope damage (foot traffic) on waterward slope. (Spring 2018)

LM Start	2.77	Rating **	М	Issue No.		40
LM End	2.77	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	IP Field Study		37.8163	62 °	37.816362°
iteiii				-121.3543	39°	-121.354339°
DWR ID						·

Comment Code

Inspector Comment

FS_ID:23311 DS_ID:19202 EP_NO: 2505

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pumphouse roof missing.- siphon breaker buried by dirt in CMP riser.- 2.25 inch electric conduit and power pole on landside.

FIELD_STRUCT_DESC: 2 of 2: 16-inch irrigation discharge pipe of an unknown material through the levee, 6.5 feet below the crown. Pump in a pump house on a pile structure in the stream. Timber walkway to the pump. Siphon breaker in a corrugated metal pipe (CMP) riser on the landside (LS) slope. Concrete distribution box at the LS toe. Timber bulkhead and slab on the waterside (WS) slope. Installed by USACE in 1963. (Plans for the installation of two irrigation pumps on the bank to replace an existing pumping plant at this location authorized under Permit No. 2505, 1959 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 2.81)].

FS Date: 10/22/2013

Photo 1 of 3: UCIP_SP_2018_23311_40175.jpg



WS view: wooden walkway to pumphouse, pumphouse on wooden pile structure in the stream.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	2.77	Rating **	М	Issue No.		40 (cont)
LM End	2.77	Issue Type +	En	Location *		
Category	Supplemental					e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		37.81636	2°	37.816362 °
пеш				-121.35433	9°	-121.354339 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:23311 DS_ID:19202 EP_NO: 2505

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pumphouse roof missing.- siphon breaker buried by dirt in CMP riser.- 2.25 inch electric conduit and power pole on landside.

FIELD_STRUCT_DESC: 2 of 2: 16-inch irrigation discharge pipe of an unknown material through the levee, 6.5 feet below the crown. Pump in a pump house on a pile structure in the stream. Timber walkway to the pump. Siphon breaker in a corrugated metal pipe (CMP) riser on the landside (LS) slope. Concrete distribution box at the LS toe. Timber bulkhead and slab on the waterside (WS) slope. Installed by USACE in 1963. (Plans for the installation of two irrigation pumps on the bank to replace an existing pumping plant at this location authorized under Permit No. 2505, 1959 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M

Manual 9, April 1964, (HLM 2.81)].

FS Date: 10/22/2013

LM Start	2.77	Rating **	М	Issue No.	40 (cont)
LM End	2.77	Issue Type +	En	Location *	

Photo 2 of 3: UCIP_SP_2018_23311_40174.jpg



WS view: exposed steel pipes and an electric conduit on levee slope.

Photo 3 of 3: UCIP_SP_2018_23311_40173.jpg



LS view: two CMP risers on levee slope, concrete distribution box, and service pole across the dirt road, off the levee toe.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	2.77	Rating **	М	Issue No.	41	
LM End	2.77	Issue Type +	En	Location *		
Category	Supplemental					e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		37.81636	2 °	37.816362 °
пеш				-121.35433	4 °	-121.354334 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:23312 DS_ID:19205 EP_NO: 2505

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pumphouse roof missing.- siphon breaker buried by dirt in CMP riser.- 2.25 inch electric conduit and power pole on landside.

FIELD_STRUCT_DESC: 1 of 2: 14-inch irrigation discharge pipe of an unknown material through the levee, 6.5 feet below the crown. Pump in a pump house on a pile structure in the stream. Timber walkway to the pump. Siphon breaker in a corrugated metal pipe (CMP) riser on the landside (LS) slope. Concrete distribution box at the LS toe. Timber bulkhead and slab on the waterside (WS) slope. Installed by USACE in 1963. (Plans for the installation of two irrigation pumps on the bank to replace an existing pumping plant at this location authorized under Permit No. 2505, 1959 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 2.81)].

FS Date: 10/22/2013

LM Start	2.77	Rating **	М	Issue No.	41 (cont)
LM End	2.77	Issue Type +	En	Location *	



WS view: wooden walkway to pumphouse, pumphouse on wooden pile structure in the stream.

Photo 2 of 3: UCIP_SP_2018_23312_40179.jpg



WS view: exposed steel pipes and a electric conduit on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	2.77	Rating **	М	Issue No.		41 (cont)			
LM End	2.77	Issue Type +	En	Location *					
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UC	IP Field Study		37.81636	2°	37.816362			
пеш				-121.35433	4 °	-121.354334			
DWR ID									

Comment Code

Inspector Comment

FS_ID:23312 DS_ID:19205 EP_NO: 2505

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 10/22/2013

UCIP Comments: - pumphouse roof missing.- siphon breaker buried by dirt in CMP riser.- 2.25 inch electric conduit and power pole on landside.

FIELD_STRUCT_DESC: 1 of 2: 14-inch irrigation discharge pipe of an unknown material through the levee, 6.5 feet below the crown. Pump in a pump house on a pile structure in the stream. Timber walkway to the pump. Siphon breaker in a corrugated metal pipe (CMP) riser on the landside (LS) slope. Concrete distribution box at the LS toe. Timber bulkhead and slab on the waterside (WS) slope. Installed by USACE in 1963. (Plans for the installation of two irrigation pumps on the bank to replace an existing pumping plant at this location authorized under Permit No. 2505, 1959 - Reclamation District No. 2062). [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 2.81)].

Photo 3 of 3: UCIP_SP_2018_23312_40180.jpg



LS view: two CMP risers on levee slope, concrete distribution box, and service pole across the dirt road, off the levee toe.

3.61	Rating **	M	Issue No.		31		
3.66	Issue Type +	Ма	Location *		LS		
Category Earthen Levee					e/Longitude		
			Start		End		
Erosion /	Bank Caving		37.81698	2°	37.816541 °		
		-121.34293	9°	-121.342191 °			
DWR ID DWR_RD2062_03_s _ 2015_31							
	3.66 Earthen L Erosion /	3.66 Issue Type + Earthen Levee Erosion / Bank Caving	3.66 Issue Type + Ma Earthen Levee Erosion / Bank Caving	3.66 Issue Type + Ma Location * Earthen Levee GPS Lat Start Erosion / Bank Caving 37.81698 -121.34293	3.66 Issue Type + Ma Location * Earthen Levee GPS Latitude Start Erosion / Bank Caving 37.816982 ° -121.342939 °		

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

About a 3 ft vertical cut at the levee toe into the levee prism.

Photo 1 of 1: SP_2018_RD2062_311_31_20180503_00033.jpg



View of the eroded landside levee toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	3.92	Rating **	М	Issue No.		21			
LM End	4.37	Issue Type +	Ma	Location *		LS			
Category Earthen Levee				GPS La	atitud	e/Longitude			
Calegory			Start		End				
Animal Control				37.8196	07°	37.818882 °			
пеш	item				57°	-121.334412 °			
DWR ID	DWR ID DWR_RD2062_03_s _ 2018_21								
		Comn	nent Cod	le					
A1 : Exterr	minate rod	ents and back	fill and c	compact or	grou	t burrows.			
		Inspecto	or Comm	nent					

No Photos

LM Start	3.99	Rating **	A/W	Issue No.	10		
LM End	4.01	Issue Type +	Ma	Location *	WS		
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start	End		
Item	DWR Ero	sion Survey		37.8208	34°	37.820834°	
iteiii				-121.3403	14°	-121.340314°	
DWR ID	RD2062U0	3RM33.92					
Comment Code							

Inspector Comment

09/13/2017: The erosion site is immediatelly downstream of a sharp river bend. [2017 Site ID:RD2062U03RM33.92]

LM Start	3.99	Rating **	A/W	Issue No.	10 (cont)
LM End	4.01	Issue Type +	Ma	Location *	WS

Photo 1 of 3: SP_2018_RD2062_311_10_20180503_00029.jpg



Front view of the erosion located at the inside of a sharp river bend.

Photo 2 of 3: SP_2018_RD2062_311_10_20180503_00030.jpg



Close view of the erosion.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	3.99	Rating **	A/W	Issue No.	10 (cont)			
LM End	4.01	Issue Type +	Ma	Location *	WS			
Category				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	DWR Ero	sion Survey		37.82083	4 °	37.820834 °		
item				-121.34031				
DWR ID	ID RD2062U03RM33.92							
	Comment Code							

Inspector Comment

09/13/2017: The erosion site is immediatelly downstream of a sharp river bend. [2017 Site ID:RD2062U03RM33.92]



Close view of the erosion. Note the sandy material of the river bank at the erosion site.

LM Start	4.30	Rating **	М	Issue No.	37		
LM End	4.35	Issue Type +	Ма	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory			Start Er		End		
Item	Erosion /	Bank Caving		37.8194	36°	37.819096	0
пеш				-121.3354	69°	-121.334829	0
DWR ID DWR_RD2062_03_f _ 2016_37							
Comment Code							

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Toe road encroaches into the levee toe.

Photo 1 of 1: SP_2018_RD2062_311_37_20180503_00035.jpg



View of the toe road encroaching into the levee prism.

LM Start	4.83	Rating **	М	Issue No.	35		
LM End	4.91	Issue Type +	Ма	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Erosion /	Bank Caving		37.8128	19°	37.811682	
пеш					16°	-121.336271	
DWR ID	DWR_RD2	062_03_f _ 201	4_35				

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

2 to 3 feet vertical cut possibly caused by previous floods.

Photo 1 of 1: SP_2018_RD2062_311_35_20180503_00034.jpg



View of a 2-3 feet vertical cut at the landside levee toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	5.16	Rating **	U	Issue No.		17	
LM End	5.16	Issue Type +	Ма	Location *	CR		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	У			Start		End	
Item	Repair Ga	ates		37.80843	32°	37.808432 °	
пеш					67°	-121.334767 °	
DWR ID	DWR_RD2	062_03_s _ 201	8_17				

Comment Code

Inspector Comment

Lock system (mechanism) should be replace safety issue. Was not able to remove lock to hard to reach due to position of lock.

Photo 1 of 1 : SP_2018_RD2062_311_17_20180523_00054.jpg

Looking north at gate (lock mechanism) should be replace or fixed. (Spring 2018)

LM Start	5.16	Rating **	М	Issue No.		19
LM End	5.16	Issue Type + Ma		Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End	
Item	Slope Sta	bility	ility		32°	37.808432 °
пеш					-121.334767 °	
DWR ID	DWR_RD2	062_03_s _ 201	8_19			

Comment Code

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

Slope damage due to gate issues. Vehicle traffic.

Photo 1 of 1: SP_2018_RD2062_311_19_20180523_00055.jpg



Looking west slope damage due to vehicle traffic. (Spring 2018)

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	5.37	Rating **	М	Issue No.		42	
LM End	5.37	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory	Category					End	
Item	DWR UC	IP Field Study		37.80730	05 °	37.807305 °	
пеш			-121.33129	90 °	-121.331290 °		
DWR ID							

Comment Code

Inspector Comment

FS_ID:23142 DS_ID:19203 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - siphon breakers not protected.- flow meter and gage station on waterside.- pump house on wooden pile structure.

Walkway to the pumphouse.

FIELD_STRUCT_DESC: 1 of 2: 16-inch irrigation discharge pipe of an unknown material through the levee, 4 feet below the crown. Pump in a pump house on a pile structure in the stream. Walkway to the pump house. Siphon breaker on the landside (LS) slope. Concrete distribution box on the LS berm. [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 5.45)].

FS Date: 10/22/2013

LM Start	5.37	Rating **	М	Issue No.	42 (cont)
LM End	5.37	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_23142_39549.jpg



WS view: steel walkway to pump house in the stream.

Photo 2 of 3: UCIP_SP_2018_23142_39548.jpg



WS view: two 16-inch pipes under walkway. Gate valve without handle on one of the pipes.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	5.37	Rating **	М	Issue No.		42 (cont)	
LM End	5.37	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory	Category					End	
Item	DWR UC	IP Field Study	37.80730	5°	37.807305 °		
пеш			-121.33129	o°	-121.331290 °		
DWR ID							

Comment Code

Inspector Comment

FS_ID:23142 DS_ID:19203 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - siphon breakers not protected.- flow meter and gage station on waterside.- pump house on wooden pile structure.

Walkway to the pumphouse.

FIELD_STRUCT_DESC: 1 of 2: 16-inch irrigation discharge pipe of an unknown material through the levee, 4 feet below the crown. Pump in a pump house on a pile structure in the stream. Walkway to the pump house. Siphon breaker on the landside (LS) slope. Concrete distribution box on the LS berm. [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 5.45)].

FS Date: 10/22/2013

Photo 3 of 3: UCIP_SP_2018_23142_39547.jpg



WS view: pump house on wooden pipe structure in the stream. Two steel pipes under the walkway.

LM Start	5.37	Rating **	М	Issue No.		43	
LM End	5.37	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory	Calegory					End	
Item	DWR UC	DWR UCIP Field Study			5°	37.807305°	
пеш				-121.33127	6°	-121.331276°	
DWR ID							

Inspector Comment

Comment Code

FS_ID:23140 DS_ID:19206 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - siphon breakers not protected.- flow meter and gage station on waterside.- pump house on wooden pile structure.

Walkway to the pumphouse.

FIELD_STRUCT_DESC: 2 of 2: 16-inch irrigation discharge pipe of an unknown material through the levee, 4 feet below the crown. Pump in a pump house on a pile structure in the stream. Walkway to the pump house. Siphon breaker on the landside (LS) slope. Concrete distribution box on the LS berm. [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 5.45)].

FS Date: 10/22/2013

Photo 1 of 3: UCIP_SP_2018_23140_39531.jpg



WS view: steel walkway to pump house in the stream.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 2062 Stewart

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	05/22/2018 05/22/2018	Richard Willoughby

LM Start	5.37	Rating **	М	Issue No.		43 (cont)		
LM End	5.37	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Category					End		
Item	DWR UC	IP Field Study		37.80730	5°	37.807305 °		
Item				-121.33127	6°	-121.331276 °		
DWR ID								

Comment Code

Inspector Comment

FS_ID:23140 DS_ID:19206 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - siphon breakers not protected.- flow meter and gage station on waterside.- pump house on wooden pile structure.

Walkway to the pumphouse.

FIELD_STRUCT_DESC: 2 of 2: 16-inch irrigation discharge pipe of an unknown material through the levee, 4 feet below the crown. Pump in a pump house on a pile structure in the stream. Walkway to the pump house. Siphon breaker on the landside (LS) slope. Concrete distribution box on the LS berm. [Additional Reference(s): DWR Levee Log, 2007. USACE San Joaquin O&M Manual 9, April 1964, (HLM 5.45)].

FS Date: 10/22/2013

LM Start	5.37	Rating **	М	Issue No.	43 (cont)
LM End	5.37	Issue Type +	En	Location *	



WS view: two 16-inch pipes under walkway. Gate valve without handle on one of the pipes.

Photo 3 of 3: UCIP_SP_2018_23140_39529.jpg



WS view: pump house on wooden pipe structure in the stream. Two steel pipes under the walkway.